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DEC 17 2002

## FORM PTO-1449 (AMENDED)

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Atty. Docket No.:  
1100.1130.101 (H16-25181)Serial No.:  
09/751,422LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION  
DISCLOSURE STATEMENT

Applicant: James Allen Cox et al.

Filing Date

Group Art:

December 29, 2000

2828

## U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA	4,317,085	02/23/1982	Brunham et al.	372	50	
AB	4,466,694	08/21/1984	MacDonald	385	37	
AC	4,660,207	04/21/1987	Svilans	372	45	
AD	4,784,722	11/15/1988	Liau et al.	156	649	
AE	4,885,592	12/05/1989	Kofol et al.	343	<del>753</del> 754	
AF	4,901,327	02/13/1990	Bradley	372	45	
AG	4,943,970	07/24/1990	Bradley	372	45	
AH	4,956,844	09/11/1990	Goodhue et al.	372	44	
AI	5,031,187	07/09/1991	Orenstein et al.	372	50	
AJ	5,052,016	09/24/1991	Mahbobzadeh	372	96	
AK	5,056,098	10/08/1991	Anthony et al.	372	45	
AL	5,062,115	10/29/1991	Thornton	372	50	
AM	5,068,869	11/26/1991	Wang et al.	372	45	
AN	5,115,442	05/19/1992	Lee et al.	372	45	
AO	5,140,605	08/18/1992	Paoli et al.	372	50	
AP	5,158,908	10/27/1992	Blonder et al.	<del>437</del> 438	<del>129</del> 32	
AQ	5,216,263	06/01/1993	Paoli	257	88	
AR	5,216,680	06/01/1993	Magnusson et al.	372	20	
AS	5,237,581	08/17/1993	Asada et al.	372	45	
AT	5,245,622	09/14/1993	Jewell et al.	372	45	
AU	5,258,990	11/02/1993	Olbright et al.	372	46	
AV	5,285,466	02/08/1994	Tabatabaie	372	92	
AW	5,293,392	03/08/1994	Shieh et al.	372	45	
AX	5,317,170	05/31/1994	Paoli	257	88	

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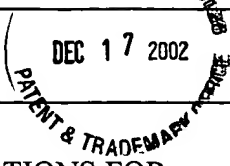
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Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AY	5,317,587	05/31/1994	Ackley et al.	372	45	
AZ	5,325,386	06/28/1994	Jewell et al.	372	50	
BA	5,331,654	07/19/1994	Jewell et al.	372	45	
BB	5,337,074	08/09/1994	Thornton	346 <sup>347</sup>	107 <sup>107R</sup>	
BC	5,349,599	09/20/1994	Larkins	372	50	
BD	5,351,256	09/27/1994	Schneider et al.	372	45	
BE	5,359,447	10/25/1994	Hahn et al.	359	154	
BF	5,359,618	10/25/1994	Lebby et al.	372	45	
BG	5,363,397	11/08/1994	Collins et al.	372	92	
BH	5,373,520	12/13/1994	Shoji et al.	372	45	
BI	5,404,373	04/04/1995	Cheng	372	50	
BJ	5,416,044	05/16/1995	Chino et al.	437 <sup>438</sup>	129 <sup>129</sup>	
BK	5,428,634	06/27/1995	Bryan et al.	372	45	
BL	5,446,754	08/29/1995	Jewell et al.	372	50	
BM	5,475,701	12/12/1995	Hibbs-Brenner	372	50	
BN	5,513,202	04/30/1996	Kobayashi et al.	372	96	
BO	5,530,715	06/25/1996	Shieh et al.	372	96	
BP	5,555,255	09/10/1996	Kock et al.	372	96	
BQ	5,557,626	09/17/1996	Grodinski et al.	372	45	
BR	5,561,683	10/01/1996	Kwon	372	96	
BS	5,568,499	10/22/1996	Lear	372	45	
BT	5,598,300	01/28/1997	Magnusson et al.	359	566	
BU	5,606,572	02/25/1997	Swirhun et al.	372	96	
BV	5,642,376	06/24/1997	Olbright et al.	372	45	
BW	5,727,013	03/10/1998	Botez et al.	372	96	

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Examiner Initial		Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
Qm	BX	5,774,487	06/30/1998	Morgan	372	45	
	BY	5,778,018	07/07/1998	Yoshikawa et al.	372	45	
	BZ	5,818,066	10/06/1998	Duboz	257	21	
	CA	5,903,590	05/11/1999	Hadley et al.	372	96	
	CB	5,940,422	08/17/1999	Johnson	372	45	
	CC	5,978,401	11/02/1999	Morgan	372	50	
Qm	CD	6,055,262	04/25/2000	Cox et al.	372	96	

#### FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub Class	Translation Yes No
<i>Qm</i>	CE	JP 5-299779	11/12/1993	Japan		Yes

#### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Qm</i>	CF	Banwell et al., "VCSE Laser Transmitters for Parallel Data Links", <u>IEEE Journal of Quantum Electronics</u> , Vol. 29, No. 2, February 1993, pp. 635-644.
	CG	Catchmark et al., "High Temperature CW Operation of Vertical Cavity Top Surface-Emitting Lasers", <u>CLEO 1993</u> , p. 138. <i>(no month) 1993.</i>
	CH	Chemla et al., "Nonlinear Optical Properties of Semiconductor Quantum Wells", <u>Optical Nonlinearities and Instabilities in Semiconductors</u> , Academic Press, Inc., Copyright 1988, pp. 83-120. <i>(no month)</i>
	CI	Choa et al., "High-Speed Modulation of Vertical-Cavity Surface-Emitting Lasers", <u>IEEE Photonics Technology Letter</u> , Vol. 3, No. 8, August 1991, pp. 697-699.
	CJ	G. G. Ortiz, et al., "Monolithic Integration of In <sub>0.2</sub> Ga <sub>0.8</sub> As Vertical Cavity Surface-Emitting Lasers with Resonance-Enhanced Quantum Well Photodetectors", <u>Electronics Letters</u> , Vol. 32, No. 13, June 20, 1996, pp. 1205-1207.
<i>Qm</i>	CK	Graf, Rudolph, <u>Modern Dictionary of Electronics</u> , 6 <sup>th</sup> ed., Indiana: Howard W. Sams & Company, 1984, p. 694. <i>(no month)</i>

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CL	Jewell et al., "Surface Emitting Microlasers for Photonic Switching & Interchip Connections", <u>Optical Engineering</u> , Vol. 29, No. 3, pp. 210-214, March 1990.
CM	Jewell et al., "Surface-Emitting Microlasers for Photonic Switching and Interchip Connections", <u>Optical Engineering</u> , Vol. 29, No. 3, March 1990, pp. 210-214.
CN	Kishino et al., "Resonant Cavity-Enhanced (RCE) Photodetectors", <u>IEEE Journal of Quantum Electronics</u> , Vol. 27, No. 8, pp. 2025-2034, August 1991.
CO	Kuchibhotla et al., "Low-Voltage High Gain Resonant Cavity Avalanche Photodiode", <u>IEEE Photonics Technology Letters</u> , Vol. 3, No. 4, pp. 354-356, April 1991.
CP	Lai et al., "Design of a Tunable GaAs/AlGaAs Multiple-Quantum-Well Resonant Cavity Photodetector", <u>IEEE Journal of Quantum Electronics</u> , Vol. 30, No. 1, pp. 108-114, January 1994.
CQ	Lee et al., "Top-Surface Emitting GaAs Four-Quantum-Well Lasers Emitting at 0-85 um", <u>Electronics Letters</u> , Vol. 24, No. 11, May 24, 1990, pp. 710-711.
CR	Lehman et al., "High Frequency Modulation Characteristics of Hybrid Dielectric/AlGaAs Mirror Singlemode VCSELs", <u>Electronic Letters</u> , vol. 31, No. 15, July 20, 1995, pp. 1251-1252.
CS	Miller et al., "Optical Bistability Due to Increasing Absorption", <u>Optics Letters</u> , Vol. 9, No. 5, May 1984, pp. 162-164.
CT	Morgan et al., "200 C, 96-nm Wavelength Range, Continuous-Wave Lasing from Unbonded GaAs MOVPE-Grown Vertical Cavity Surface-Emitting Lasers", <u>IEEE Photonics Technology Letters</u> , Vol. 7, No. 5, May 1995, pp. 441-443.
CU	Jiang et al., "High-Frequency Polarization Self-Modulation in Vertical-Cavity Surface-Emitting Lasers", <u>Appl. Phys. Letters</u> , Vol. 63, No. 26, December 27, 1993, pp. 2545-2547.
CV	Morgan et al., "High-Power Coherently Coupled 8x8 Vertical Cavity Surface Emitting Laser Array", <u>Appl. Phys. Letters</u> , Vol 61, No. 10, September 7, 1992, pp. 1160-1162.
CW	Morgan et al., "Hybrid Dielectric/AlGaAs Mirror Spatially Filtered Vertical Cavity Top-Surface Emitting Laser", <u>Appl. Phys. Letters</u> , Vol. 66, No. 10, March 6, 1995, pp. 1157-1159.
CX	Morgan et al., "Novel Hybrid-DBR Single-Mode Controlled GaAs Top-Emitting VCSEL with Record Low Voltage", 2 pages, dated prior to December 29, 2000.
CY	Morgan et al., "Progress and Properties of High-Power Coherent Vertical Cavity Surface Emitting Laser Arrays", <u>SPIE</u> , Vo. 1850, January 1993, pp. 100-108.
CZ	Morgan et al., "Progress in Planarized Vertical Cavity Surface Emitting Laser Devices and Arrays", <u>SPIE</u> , Vol. 1562, July 1991, pp. 149-159.
DA	Morgan et al., "Submilliamp, Low-Resistance, Continuous-Wave, Single-Mode GaAs Planar Vertical-Cavity Surface Emitting Lasers", Honeywell Technology Center, June 6, 1995.

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SM	DB	Morgan et al., "Transverse Mode Control of Vertical-Cavity Top-Surface Emitting Lasers", <u>IEEE Photonics Technology Letters</u> , Vol. 4, No. 4, April 1993, pp. 374-377.
	DC	Morgan et al., "Vertical Cavity Surface Emitting Laser Arrays: Come of Age," , Invited paper, <u>SPIE</u> , Vol. 2683-04, OE LASE 96; Photonics West: Frabrication, Testing and Reliability of Semiconductor Lasers, (SPIE< Bellingham, WA, 1996). (no month)
	DD	Morgan et al., "Vertical-Cavity Surface-Emitting Laser Arrays" <u>SPIE</u> , Vol. 2398, February 1995, pp. 65-93.
	DE	Morgan, "High-Performance, Producible Vertical Cavity Lasers for Optical Interconnects", <u>High Speed Electronics and Systems</u> , Vol. 5, No. 4, December 1994, pp. 65-95.
	DF	Morgan, "Transverse Mode Control of Vertical-Cavity Top-Surface Emitting Lasers", <u>IEEE Phot. Tech. Lett.</u> , Vol. 4, No. 4., p. 374, April 1993.
	DG	Nugent et al., "Self-Pulsations in Vertical-Cavity Surface-Emitting Lasers", <u>Electronic Letters</u> , Vol. 31, No. 1, January 5, 1995, pp. 43-44.
SM	DH	U.S. Patent Application Serial No. 09/751,423, filed December 29, 2000, entitled "Spatially Modulated Reflector for an Optoelectronic Device".
SM	DI	<del>U.S. Patent Application Serial No. 09/751,422, filed December 29, 2000, entitled "Resonant Reflector for Use with Optoelectronic Devices".</del>

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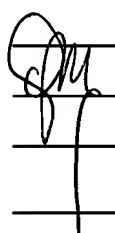
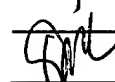
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## FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Sub Class	Translation Yes No
	AA	DE 4 240 706 A	06/09/1994	Germany			
	AB	EP 0 288 184 A	10/26/1988	Europe			
	AC	EP 0 776 076 A	05/28/1997	Europe			
	AD	JP 60-123084 A	07/01/1985	Japan			Yes (Abstract only)
	AE	JP 02-054981 A	02/23/1990	Japan			Yes (Abstract only)

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AF	Guenther et al., "Reliability of Proton-Implanted VCSELs for Data Communications", Invited paper, <u>SPIE</u> , Vol. 2683, OE LASE 96; Photonics West: Fabrication, Testing and Reliability of Semiconductor Lasers, (SPIE, Bellingham, WA 1996). (no month)
	AG	Hibbs-Brenner et al., "Performance, Uniformity and Yield of 850nm VCSELs Deposited by MOVPE", <u>IEEE Phot. Tech. Lett.</u> , Vol. 8, No. 1, pp. 7-9, January 1996.
	AH	Hornak et al., "Low-Temperature (10K-300K) Characterization of MOVPE-Grown Vertical-Cavity Surface-Emitting Lasers", <u>Photon. Tech. Lett.</u> , Vol. 7, No. 10, pp. 1110-1112, October 1995.
	AI	Huffaker et al., "Lasing Characteristics of Low Threshold Microcavity Layers Using Half-Wave Spacer Layers and Lateral Index Confinement", <u>Appl. Phys. Lett.</u> , Vol. 66, No. 14, pp.1723-1725, April 3, 1995.
	AJ	K.L. Lear et al., "Selectively Oxidized Vertical Cavity Surface-Emitting Lasers with 50% Power Conversion Efficiency", <u>Elec. Lett.</u> , Vol. 31, No. 3 pp. 208-209, February 2, 1995.
	AK	Lehman et al., "High Frequency Modulation Characteristics of Hybrid Dielectric/AlGaAs Mirror Singlemode VCSELs", <u>Electronic Letters</u> , vol. 31, No. 15, July 20, 1995, pp. 1251-1252.
	AL	Magnusson, "Integration of Guided-Mode Resonance Filters and VCSELs", Electro-Optics Research Center, Department of Electrical Engineering, University of Texas at Arlington, May 6, 1997.

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AM	Morgan et al., "Hybrid Dielectric/AlGaAs Mirror Spatially-Filtered Vertical Top-Surface Emitting Laser", <u>Appl. Phys. Lett.</u> , Vol. 60, No. 8, pp. 921-923, February 24, 1992.
AN	Morgan et al., "One Watt Vertical Cavity Surface Emitting Laser", <u>Electron. Lett.</u> , Vol. 29, No. 2, pp. 206-207, January 21, 1993
AO	Morgan et al., "Producible GaAs-based MOVPE-Grown Vertical-Cavity Top-Surface Emitting Lasers with Record Performance", <u>Elec. Lett.</u> , Vol. 31, No. 6, pp. 462-464, March 16, 1995.
AP	Morgan et al., "Spatial-Filtered Vertical-Cavity Top Surface-Emitting Lasers", <u>CLEO</u> , 1993, pp. 138-139. (no month)
AQ	Morgan et al., "Vertical Cavity Surface Emitting Laser Arrays: Come of Age," , Invited paper, <u>SPIE</u> , Vol. 2683-04, OE LASE 96; Photonics West: Frabrication, Testing and Reliability of Semiconductor Lasers, (SPIE< Bellingham, WA, 1996). (no month)
AR	S.S. Wang and R. Magnusson, "Multilayer Waveguide-Grating Filters", <u>Appl. Opt.</u> , Vol. 34, No. 14, pp. 2414-20, 1995. (no month)
AS	S.S. Wang and R. Magnusson, "Theory and Applications of Guided-Mode Resonance Filters", <u>Appl. Opt.</u> , Vol. 32, No. 14, pp. 2606-13, 1993. (no month)
AT	Schubert, "Resonant Cavity Light-Emitting Diode", <u>Appl. Phys. Lett.</u> , Vol. 60, No. 8, pp. 921-923, February 24, 1992.
AU	Y. M. Yang et al., "Ultralow Threshold Current Vertical Cavity Surface Emitting Lasers Obtained with Selective Oxidation", <u>Elect. Lett.</u> , Vol. 31, No. 11, pp. 886-888, May 25, 1995.
AV	Yablonovitch et al., "Photonic Bandgap Structures", <u>J. Opt. Soc. Am. B.</u> , Vol. 10, No. 2, pp. 283-295, February 1993.
AW	Young et al., "Enhanced Performance of Offset-Gain High Barrier Vertical-Cavity Surface-Emitting Lasers", <u>IEEE J. Quantum Electron.</u> , Vol. 29, No. 6, pp. 2013-2022, June 1993.
AX	Smith, R.E. et al., "Polarization-Sensitive Subwavelength Antireflection Surfaces on a Semiconductor for 975 NM, <u>Optics Letters</u> , Vol. 21, No. 15, August 1, 1996, pp. 1201-1203.
AY	Suning Tang et al., "Design Limitations of Highly Parallel Free-Space Optical Interconnects Based on Arrays of Vertical Cavity Surface-Emitting Laser Diodes, Microlenses, and Photodetectors", <u>Journal of Lightwave Technology</u> , Vol. 12, No. 11, November 1, 1994, pp. 1971-1975.

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<i>gm</i>	AZ	Cox, J. A., et al., "Guided Mode Grating Resonant Filters for VCSEL Applications", <u>Proceedings of the SPIE</u> , The International Society for Optical Engineering, Diffractive and Holographic Device Technologies and Applications V, San Jose, California, January 28-29, 1998, Vol. 3291, pages 70-71.
1	BA	Martinsson et al., "Transverse Mode Selection in Large-Area Oxide-Confined Vertical-Cavity Surface-Emitting Lasers Using a Shallow Surface Relief", <u>IEEE Photon. Technol. Lett.</u> , 11(12), 1536-1538, December 1999.
	BB	Choquette et al., "Lithographically-Defined Gain Apertures Within Selectively Oxidized VCSELs", paper CtuL6, Conference on Lasers and Electro-Optics, San Francisco, California, May 2000.
	BC	Oh, T. H. et al., "Single-Mode Operation in Antiguided Vertical-Cavity Surface-Emitting Laser Using a Low-Temperature Grown AlGaAs Dielectric Aperture", <u>IEEE Photon. Technol. Lett.</u> , 10(8), 1064-1066 (1998). <i>(no month)</i>
	BD	"Surface-Emitting Microlasers for Photonic Switching and Interchip Connections", <u>Optical Engineering</u> , 29, pp. 210-214, March 1990.
<i>gm</i>	BE	G. Shtengel et al., "High-Speed Vertical-Cavity Surface-Emitting Lasers", <u>Photon. Tech. Lett.</u> , Vol. 5, No. 12, pp. 1359-1361 (December 1993).
	BF	U.S. Patent Application Serial No. 09/751,423, filed December 29, 2000, entitled "Spatially Modulated Reflector for an Optoelectronic Device". <i>Duplicate</i>

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